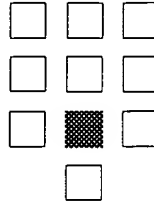




Netergy Advanced Telephony System

Netergy Media Hub 4



The Netergy™ Media Hub 4 is a cost-effective device that bridges the gap between conventional telephony equipment such as telephones and fax machines and the new world of Internet protocol (IP) communications over private and public networks. One Netergy Media Hub 4 supports up to four independent calls simultaneously. Multiple Media Hubs can be used in an IP telephony system to provide as many lines as required.

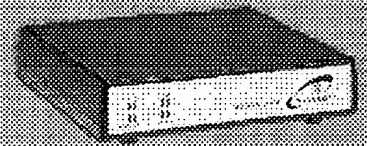
In concert with full-featured iPBXs such as 8x8's Netergy iPBX Server Software, the Netergy Media Hub 4 offers a full range of PBX features, including call waiting, call hold, call transfer, three-way calling, message waiting indicator, and call forwarding. During a phone call, the feature set can be controlled via the touch-tone keypad of a standard telephone. Because it uses standard touch-tone telephones as both its audio and user interface, Netergy-based systems are both reliable and cost-effective, especially when compared to proprietary digital PBX telephones.

While Media Hubs can be placed in a central wiring closet, the unit's small foot-print makes it ideal for "distributed telephony," with Media Hubs located near the telephones that they support. For example, a Netergy Media Hub 4 could be located at the union of four office cubicles, eliminating the need for a separate twisted-pair wiring network for telephones in an office.

The Media Hub 4 supports the MGCP Voice over IP (VoIP) standard with Netergy extensions for auto discovery and configuration. The Netergy Media Hub 4 also incorporates FLASH memory and remote upgrade capability, so that the Netergy iPBX Server Software can upgrade the Media Hubs automatically via the network as required.

To avoid network congestion, the Netergy Media Hub 4 supports several low bit rate audio codecs, including G.723.1 and G.728, in addition to standard rate codecs (G.711 and G.722). The unit is codec agile, allowing the iPBX Server Software to specify different codecs on each line and to switch codecs during a call if network conditions demand that it do so. Full acoustic echo cancellation and comfort noise generation are also supported on each line.

The Media Hub 4 is part of a complete family of Netergy Media Hubs, including the Media Hub 2 and the Media Hub 24. The Media Hub 2 provides two analog telephone lines and is intended to support a two line phone or a phone and a fax machine in a single office. The Media Hub 24 provides 24 lines in a rack mount format and is designed for centralized wiring closet installations.



Enables Complete PBX Functionality

Call waiting, call hold, call transfer, three-way calling, call forwarding, Caller ID, call waiting ID, dual tone, numeric dial tone, busy, fax busy, hook switch, flash detection, message waiting indicator

Supports Industry Standard Protocol

MGCP v0.1 with Netergy Auto Discovery

Multiple Audio Channels

Supports up to four G.711, G.723.1 or two G.728 audio codecs simultaneously

Flexible Audio

Supports G.711, G.723.1, G.723.1 and G.728 audio codecs with asymmetry

Full-Duplex AEC

64ms, 18dB acoustic echo cancellation

Connects to Ethernet

Supports the popular 10Base-T Ethernet format

Remote Configuration and Upgrade

Supports static and DHCP protocol for automatic IP configuration. Allows upgrade with new software by a remote server.

Keyphone Compatible

System control managed by DTMF detection of telephone tones as in existing PABX and PBX systems

Leading-Edge Technology

Based on 8x8's highly-integrated Audio by Internet Telephony Processor

Ideal Applications

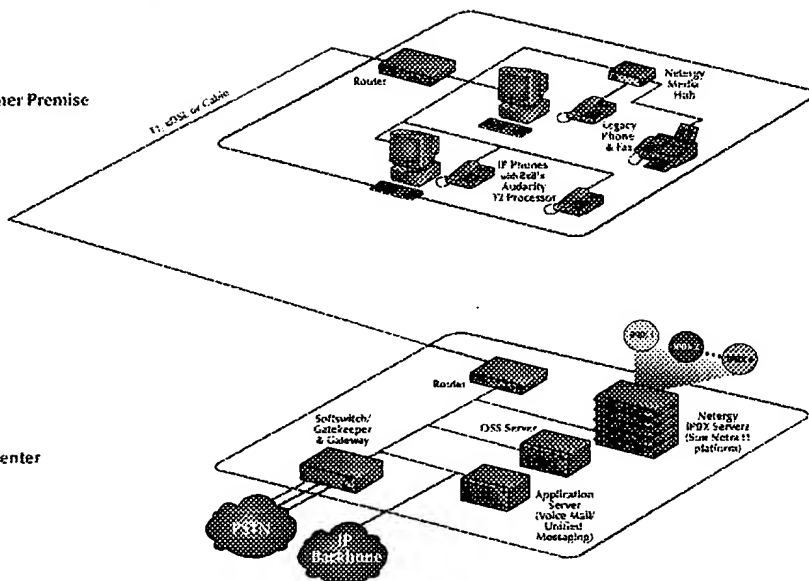
Allows CLECs, ISPs and ASBs to offer IP telephony to businesses and multiple dwelling units

Model Number

VE11-001A0000



Customer Premise



Data Center

Call Control Standards

The Netergy Media Hub 4 supports the following communication standards for IP networks.

- MGCPv0.1 with Netergy Auto Discovery
- DHCP, TCP/IP, UDP, SNMP, RTP, RTCP

Audio Standards and Performance

- G.711, G.722, G.723.1, G.728
- Acoustic echo cancellation (64ms tail, 18dB rejection)
- Voice activity detection
- Comfort noise generation
- DTMF detection
- Call tone generation

Network Interface

- 10Base-T

Audio

Codes

- G.711, G.722, G.723.1, G.728

Frequency Response

- 300Hz - 3.4KHz
- Full Duplex
- Automatic Gain Control
- Acoustic Echo Cancellation (64ms tail, 18dB rejection)

Network Interface

Physical

- 10Base-T Ethernet

Transport

- TCP/IP

Configuration

- DHCP

Telephone Interface

Connector

- RJ11

Cable Length (m/ft/mx)

- 1m/200m

Power Feed (mVtyp/max)

- 23/50/55V

Ring Impedance

- 5.0kNCOFF Hook Current (mVtyp/max)
- 23.5/44/2 + 5 mA

AC Load Impedance

- 600 Ohms

Electrical

Operating Voltage

- 15 Vdc

Power Consumption

- 14 watts

Environmental

Temperature

- Operating: 14° to 42° F (5° to 33° C)
- Storage: -40° to 160° F (-40° to 70° C)

Humidity

- Operating: 15% to 80%
- Storage: 10% to 90%

Regulatory Compliance

- FCC Part 15, Class B, CE, UL

Dimensions

Height x Width x Depth

- 1.0 x 7.0 x 7.125 in
- 2.5 x 17.8 x 18.0 cm

Weight

- 1 lb. (0.5 kg)



North America and Pacific Rim

ExB, Inc.
2445 Mission College Blvd
Santa Clara, California 95054
+1 408 747 1885 voice
+1 408 980 0433 fax/telex

Europe

ExB, Inc.
120 Route Des Moutons
Sophia Antipolis, France 06560
+33 4 92 94 86 80 voice
+33 4 92 94 86 31 fax/telex

www.exb.com

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